

ABSTRACT OF THE DISCLOSURE:

An articulated and animated toy capable of recognizing human users and selected inanimate objects and interacting therewith which includes a computer-based device having stored thereon encoded first human or human-like facial images, a video camera and video digitizer for acquiring data representative of a second human or human-like facial image, and software resident within said computer-based device for facial recognition, which includes Principal Component Analysis, Neural Networks, or another equivalent algorithm for comparing said first human or human-like facial images with said second human or human-like facial image and producing an output signal therefrom for use in identifying said human users. The apparatus can further include software for recognizing speech, generating speech and controlling animation of the articulated toy. In addition, said computer-based device is capable of learning and storing information pertaining to each of said human users such as name, age, sex, favorite color, etc., and to interact with each of said human users on an individual basis, providing entertainment tailored specifically to each of said human users.